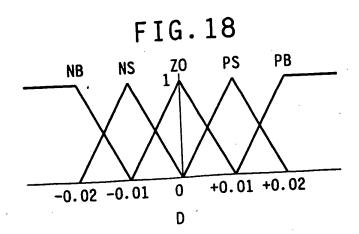


FIG.7

| DATA STORED IN AUXILIARY MEMORY 32 | | | | |
|------------------------------------|----------------------|---|--------------------------------------|---------------------------|
| MEASURED VALUES | MOVING AVERAGES | PROVI- SIONAL COMPEN- SATING VALUES | FINAL COMPEN- SATING VALUES | APPLIED FUZZY RULES |
| X0 X1 X2 Xi | P0 P1 P2 Pi | U0 U1 U2 Ui | U0* U1* U2* : | |



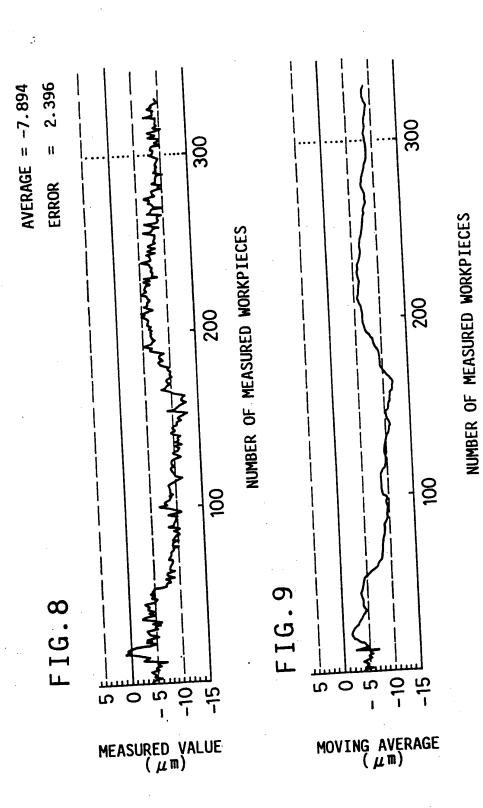
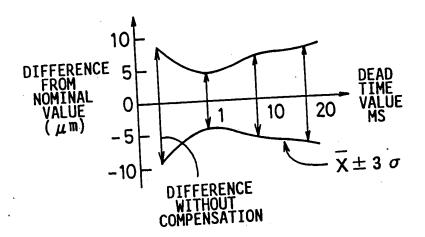


FIG. 10



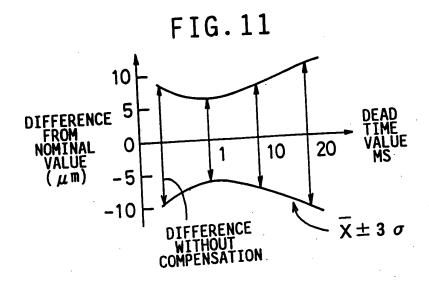
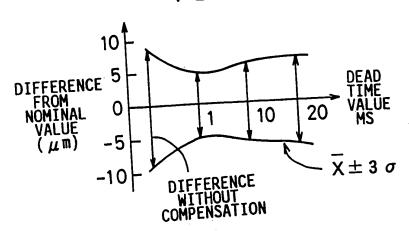
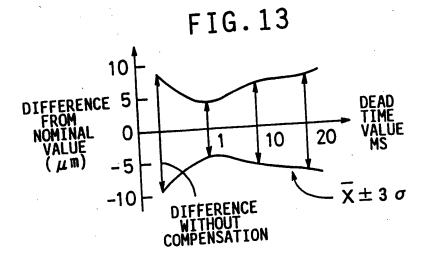
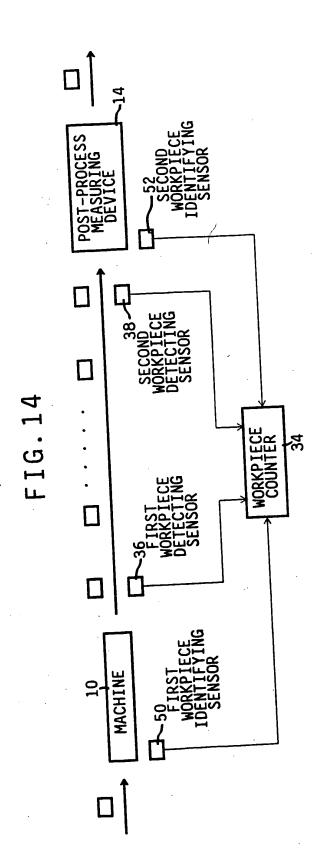
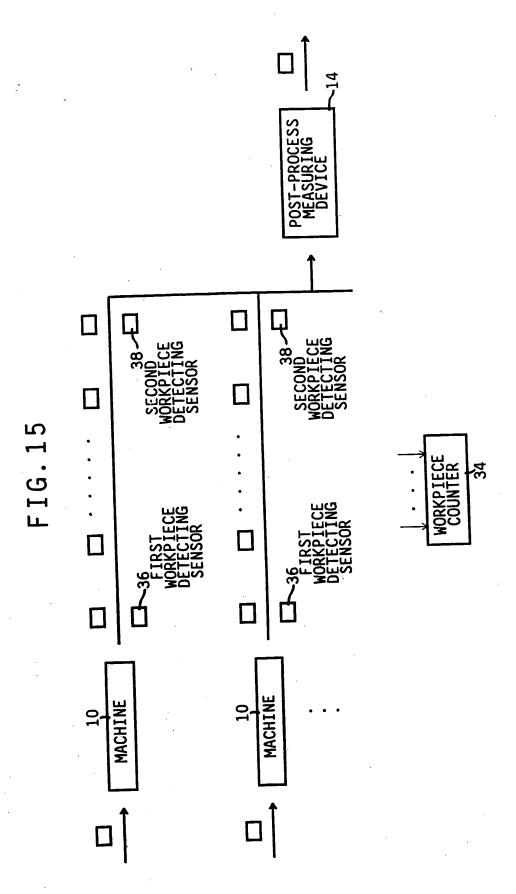


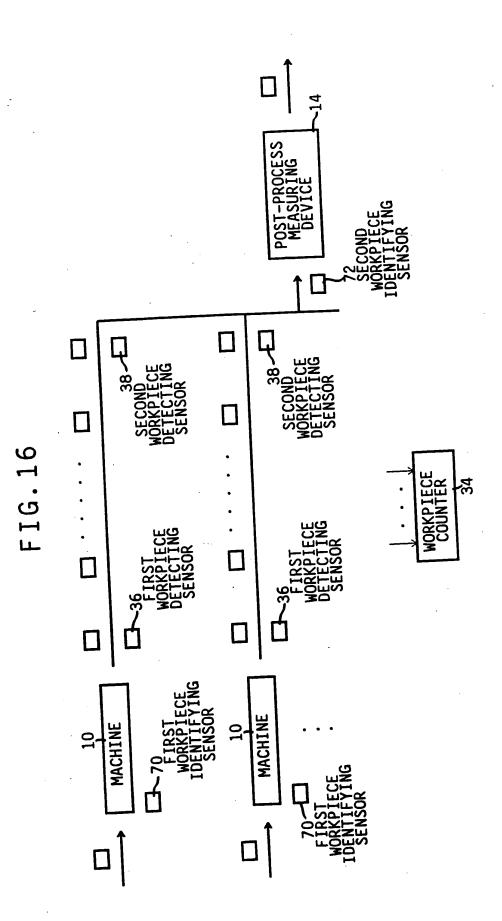
FIG. 12

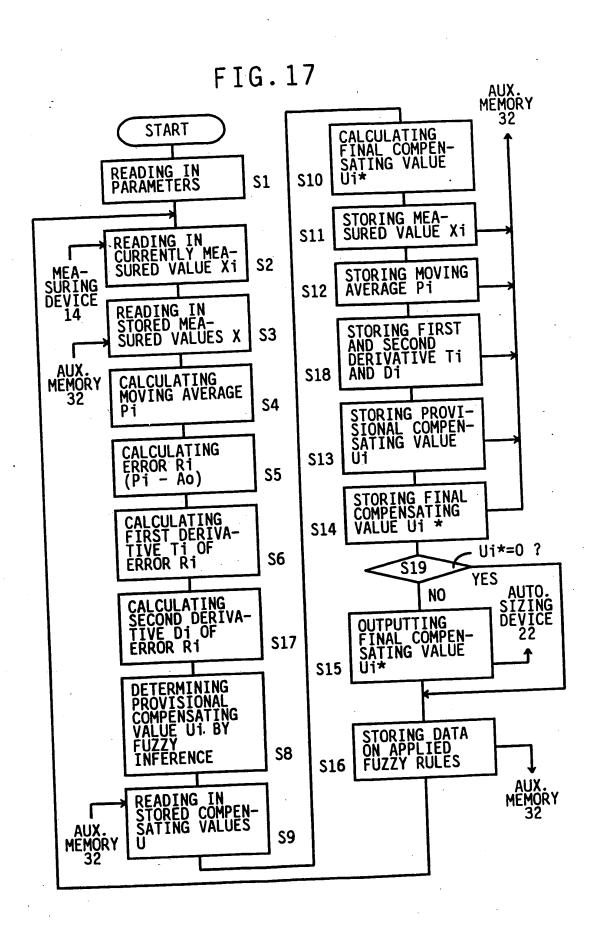


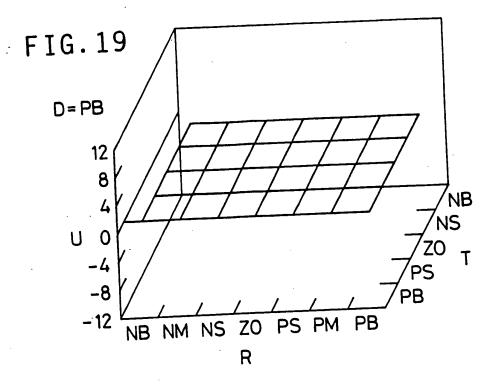


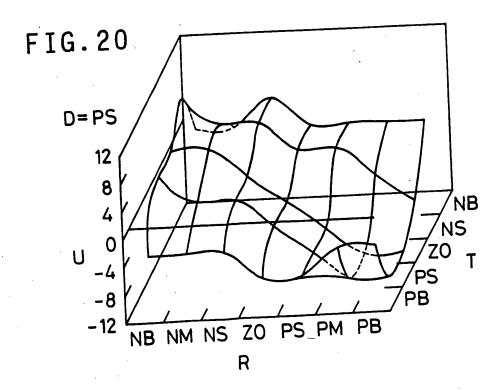


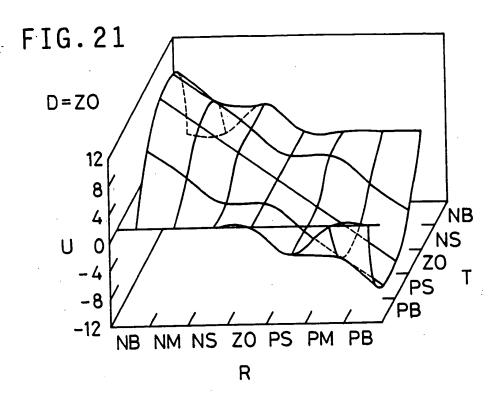


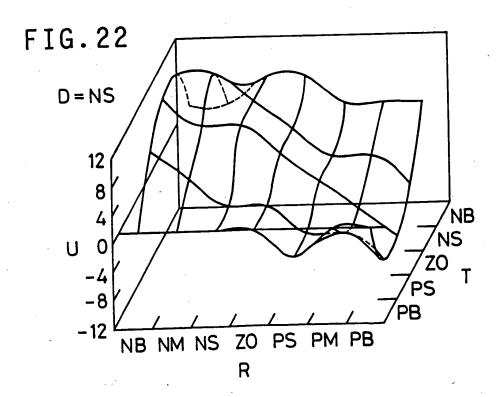


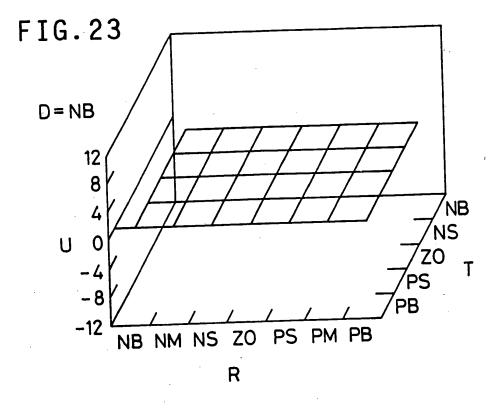


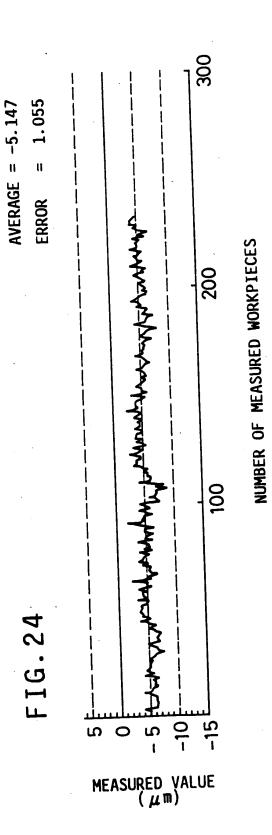


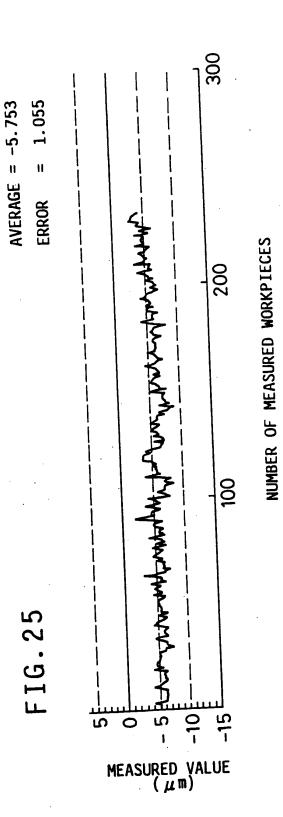


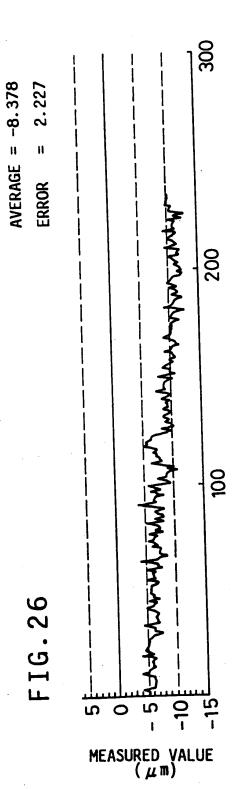




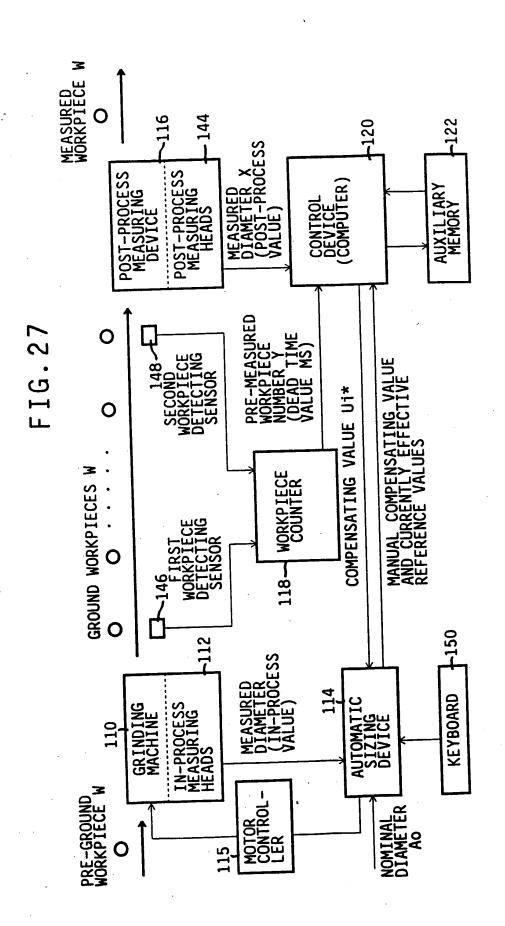


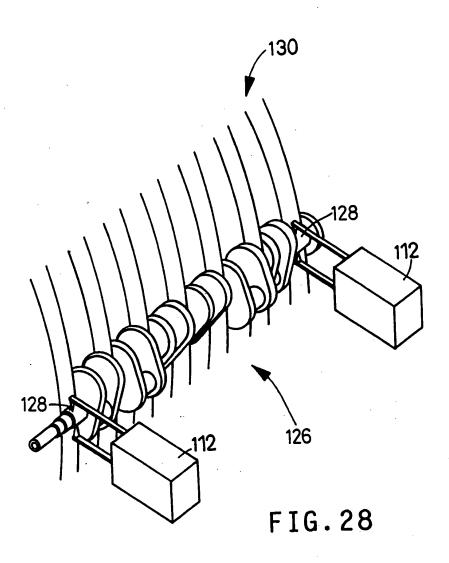






NUMBER OF MEASURED WORKPIECES





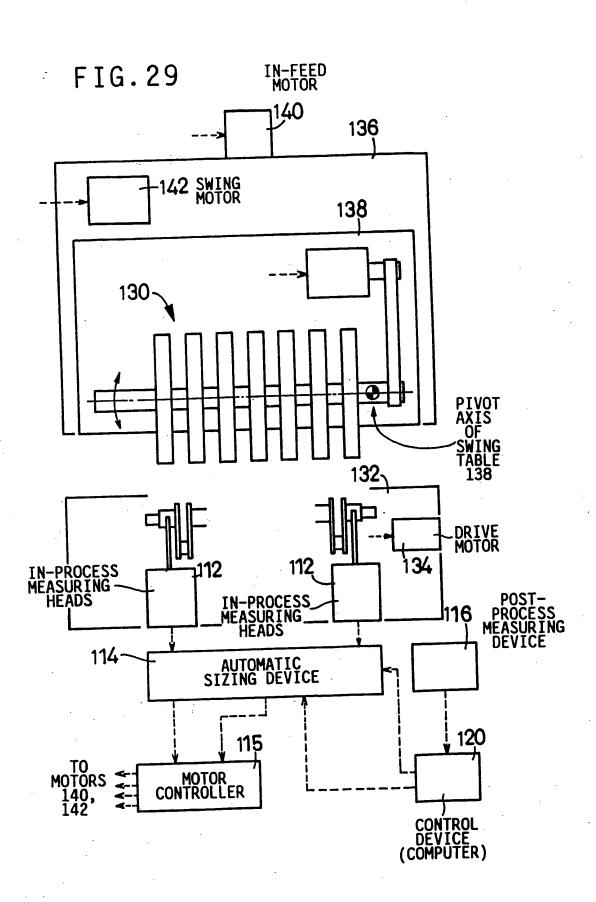
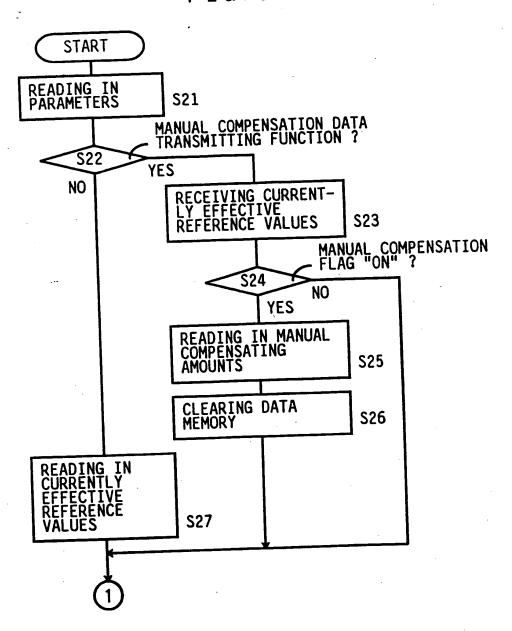
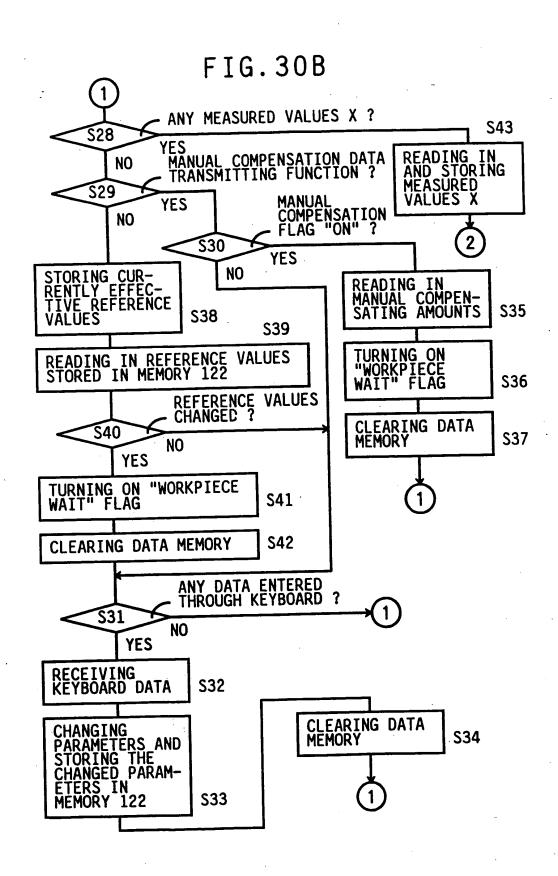
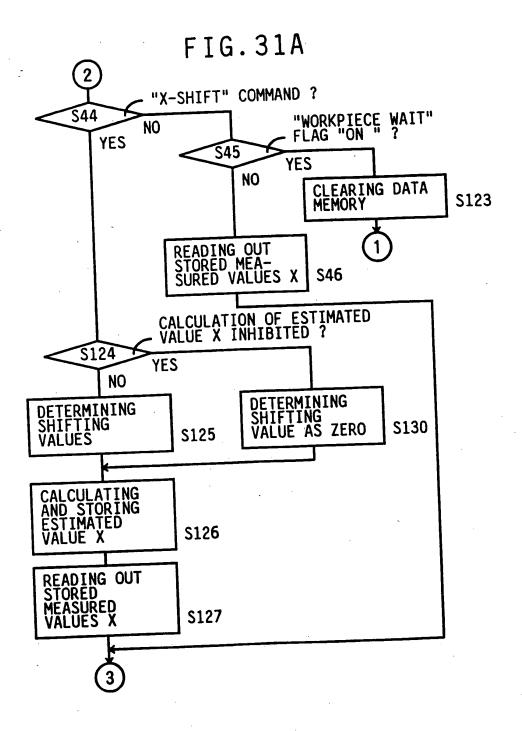
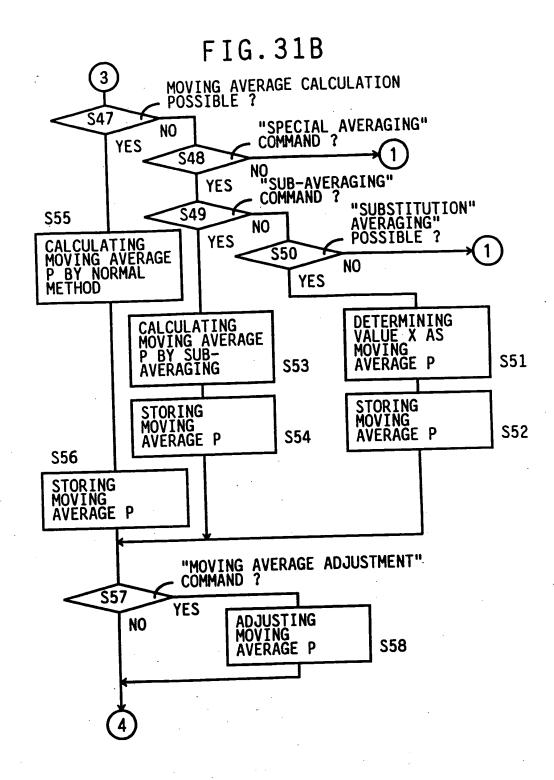


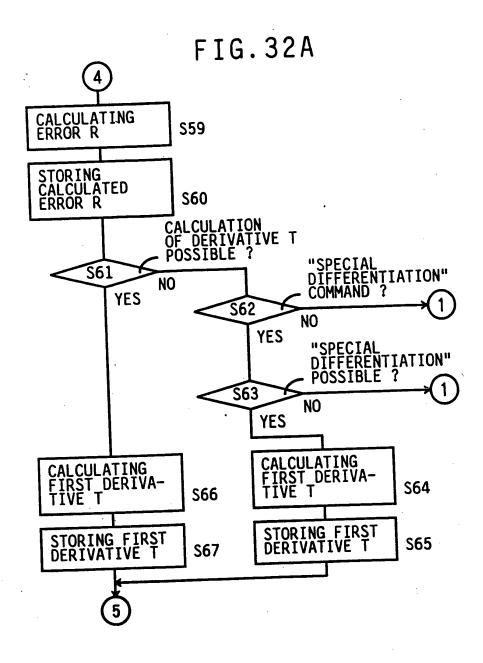
FIG.30A

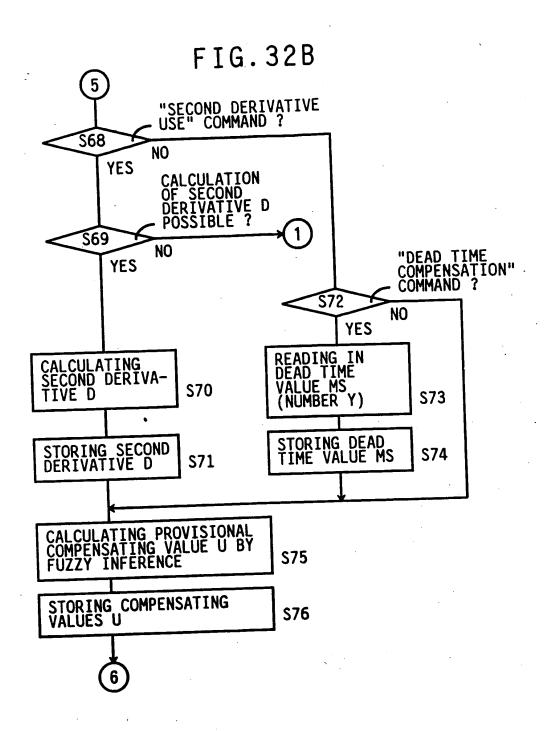












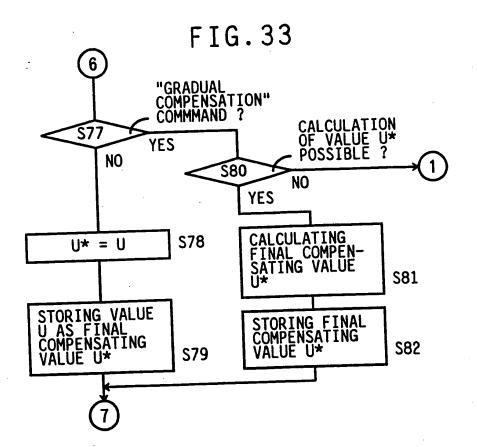


FIG. 34A

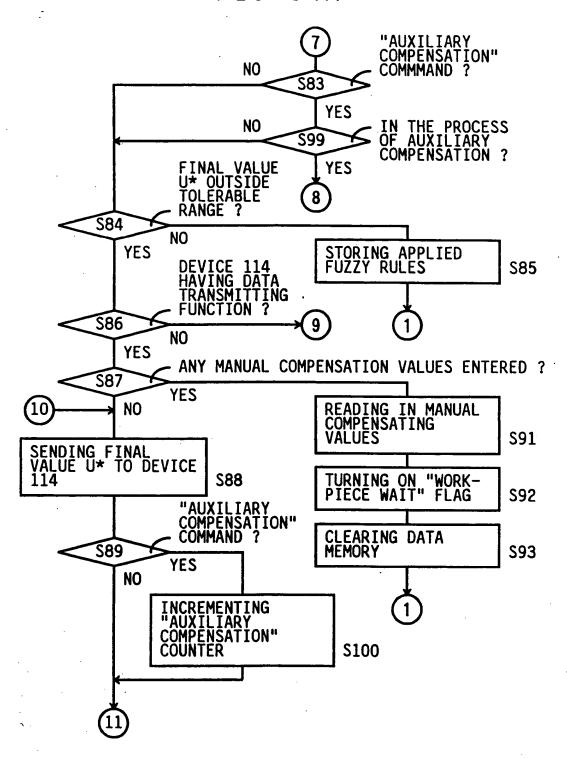


FIG.34B

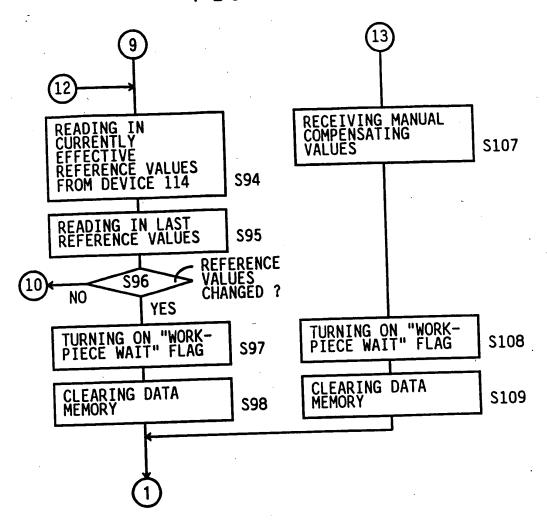


FIG.34C

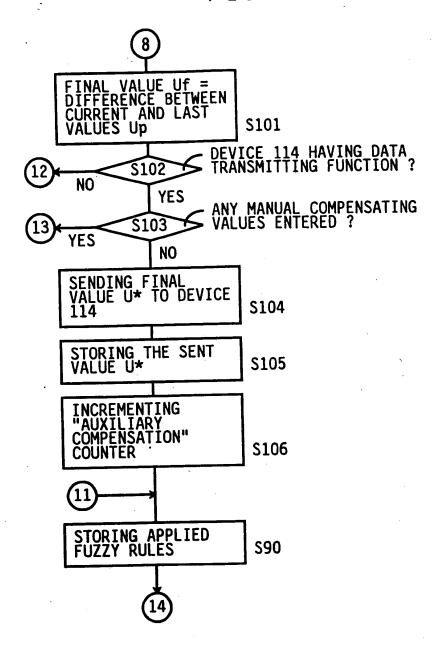


FIG.35A

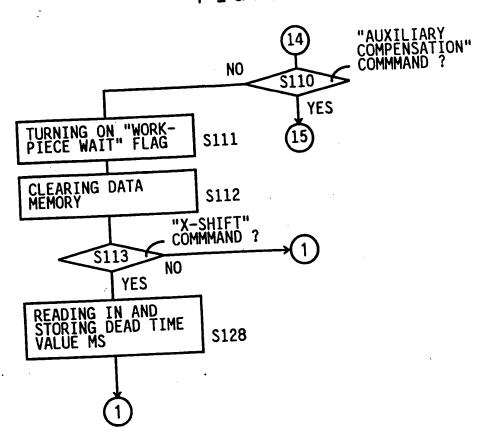
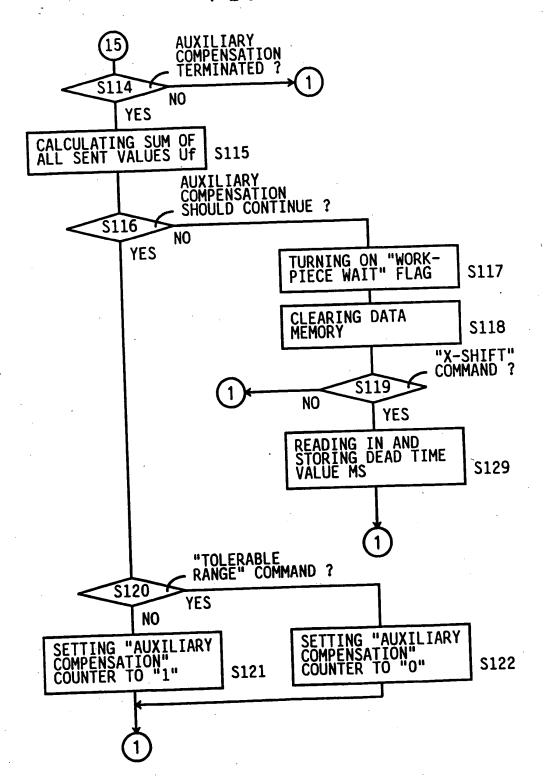


FIG.35B



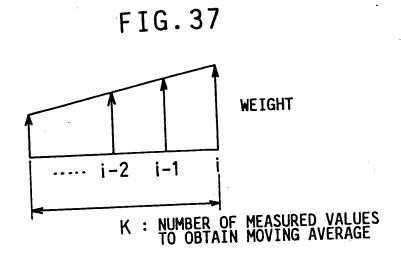
٩ THIRD STEP ADJUSTING THE MOVING AVERAGES P SIXTH STEP OBTAINED FINAL COMPENSAT VALUES UX FOR GRADU COMPENSAT ۵ MOVING AVERAGES COMPENSATING VALUES U SECOND STEP DETERMINING PROVISIONAL COMPENSATING VALUES U BY FUZZY INFERENCE FIFTH STEP DEAD TIME VALUE MS (NUMBER Y) SECOND DERIVATIVE D FIRST STEP FIRST DERIVATIVE ÜRRENTLY HEASURED VALUES X READING ERROR R 118 MEASURED VALUES X COUNTER CALCULATING COMPENSATING DATA FOURTH STEP WORKPIECE

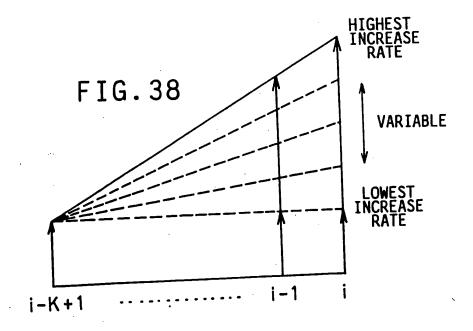
DATA TRANSMISSION

EIGHTH STEP

SEVENTH STEP

FIG.36





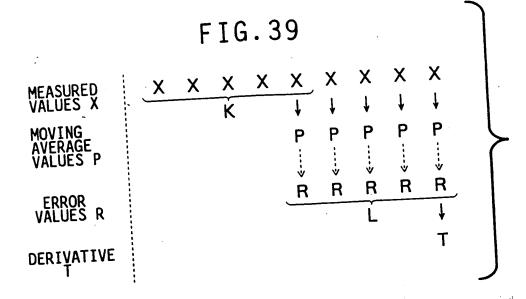


FIG. 41 X MEASURED VALUES X X MOVING AVERAGE VALUES P **P4** Р3 **P2** Ρ1 ∷ × R ERROR VALUES R R R R DERIVATIVE T T

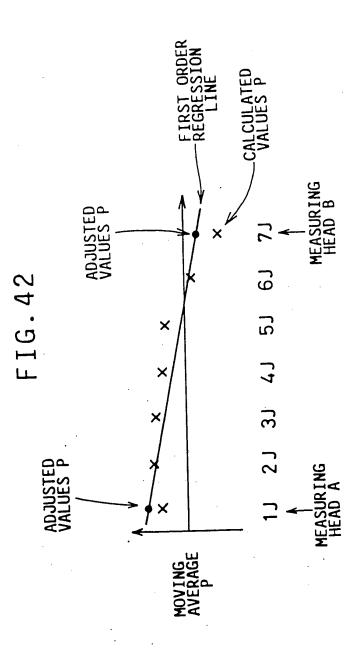
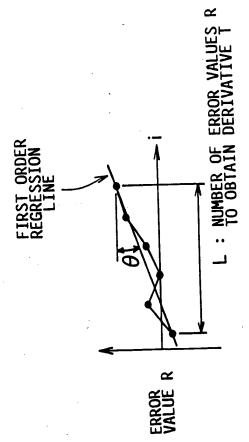
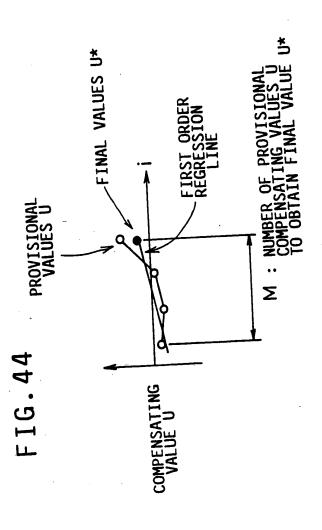
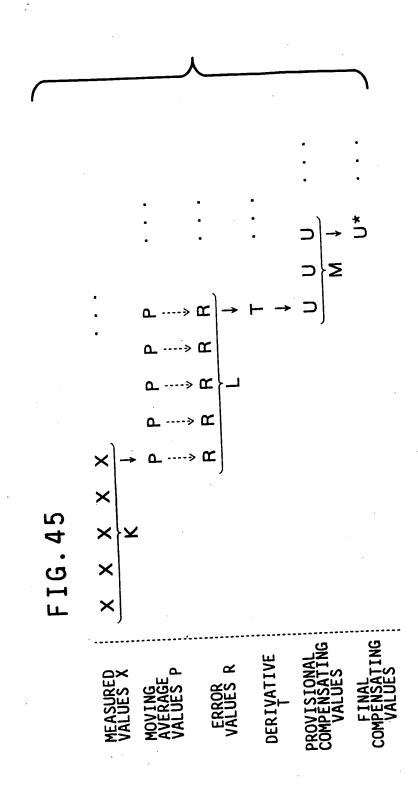
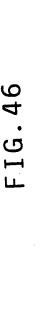


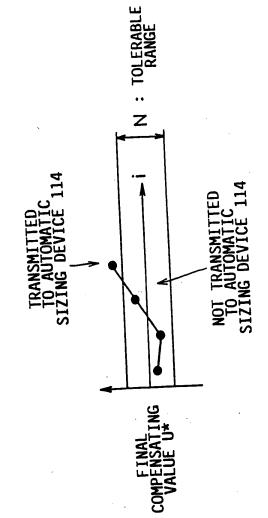
FIG. 43

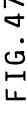


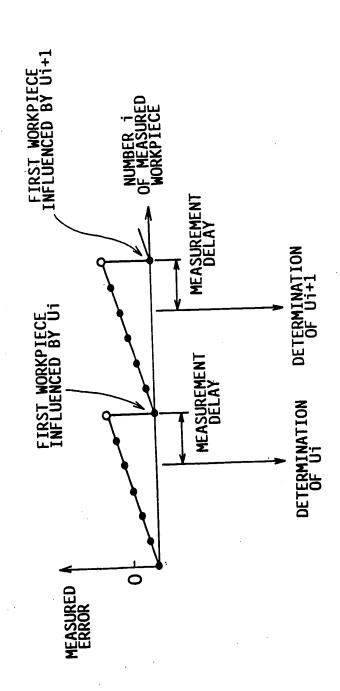


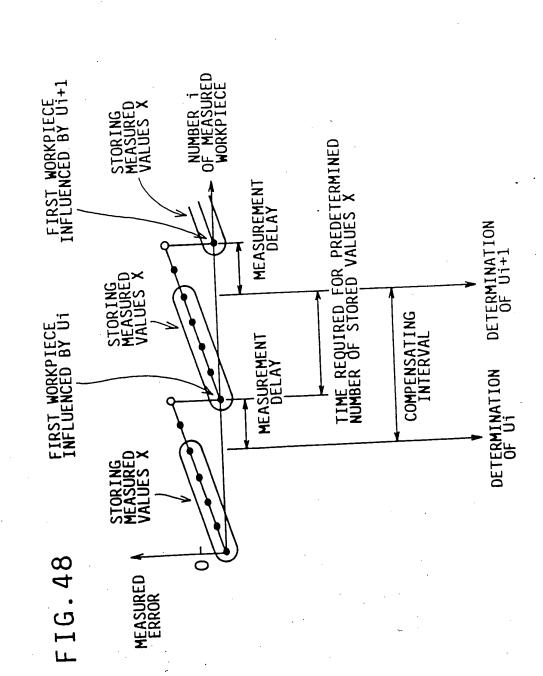


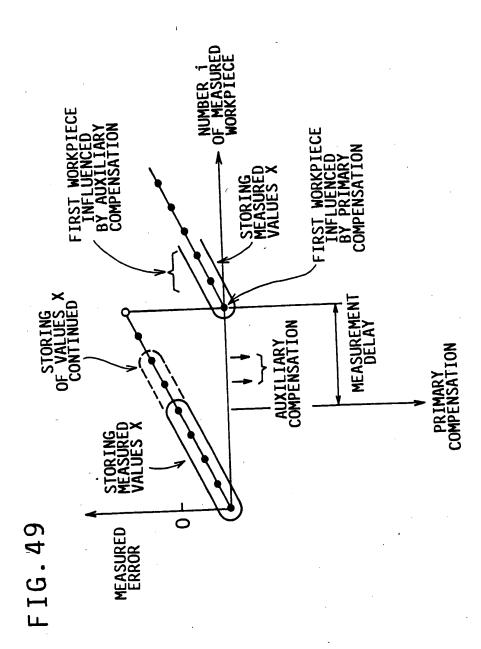


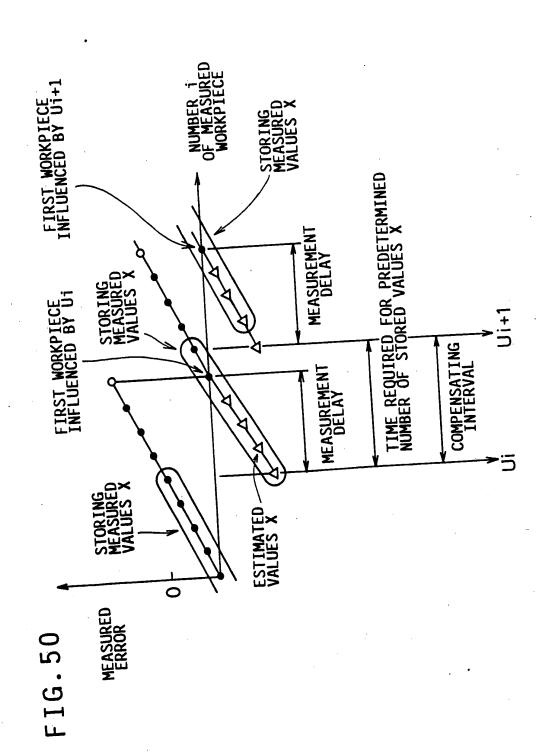












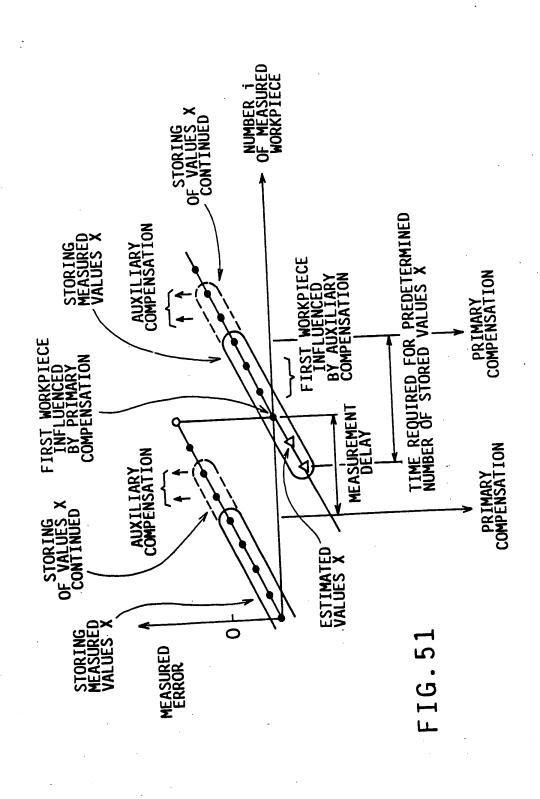


FIG. 52

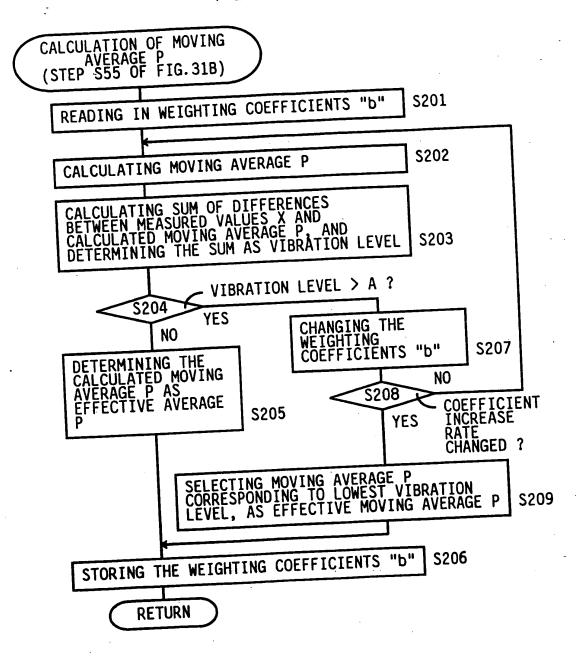


FIG. 53

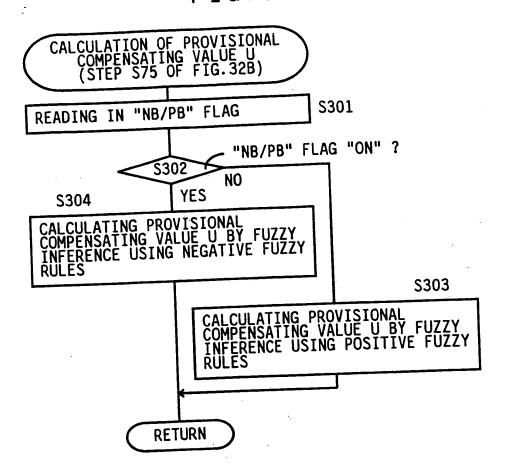


FIG. 54

